Issues

- Analysis of the International Energy Agency members countries shows, that energy efficient buildings, mostly built after 1980, represent about 20 % of the building stock but only 5% of the energy consumption
- To meet the objectives of national energy conservation programs (e.g. Executive Order 13 123 in the USA) and international programs (e.g., the Kyoto Protocol), we must concentrate on improving the energy-inefficient building stock, focussing on the energy consumption for heating, cooling, ventilation and lighting.
- The focus of our workshop is on the energy retrofit in selected building categories that represent a substantial part of the non-residential building stock: office/administrative buildings, hospitals, large one-storey production facilities and maintenance shops, and specialist warehouses

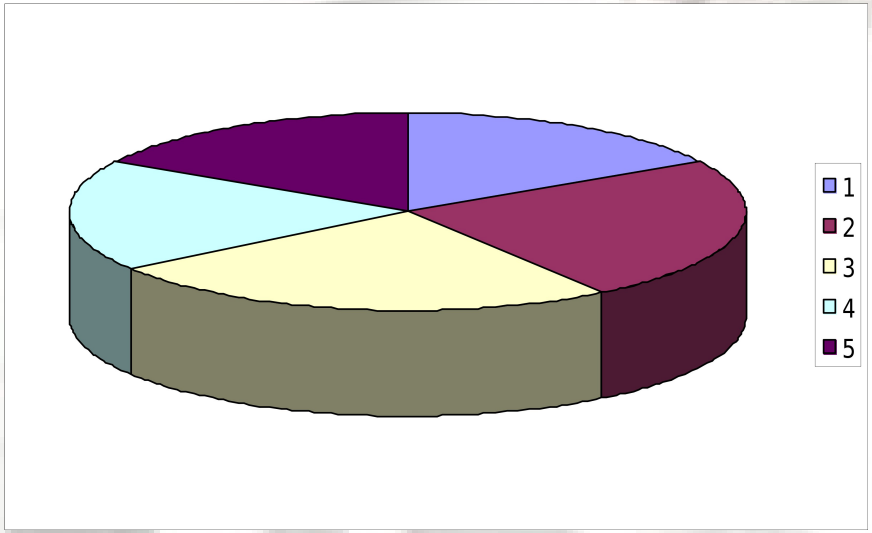
Energy Technology Programs

- ACSIM Technology Standardization Group
- Navy's Technology Validation Program
- FEMP Technology transfer program
- EPA Energy Star Program
- ASHRAE Advance Energy Design Guide
- International Energy Agency ECBCS Program
- European Project "BRITA in PuBs"
- German Program “Assessment of the Energy Performance of Public Buildings”
- Finnish TEKES Program
- Danish Energy Program
- …..

Workshop Objectives

- Share information and ideas in a collegial forum
- Provide technical and methodological support to energy managers, designers, and Energy Saving Companies
- Provide a forum to prepare the detailed Program of Work, select subtasks leaders and distribute tasks for the IEA ECBCS Annex 46 “Holistic Assessment Tool-kit on Energy Efficient Retrofit Measures for Government Buildings (EnERGo)

Workshop Participants



1. Energy managers/end-users: 12
2. Government Agencies policy/decision makers (DOD, DOE, EPA, NASA, ASHRAE, TEKES): 17
3. Academia: 19
4. HVAC products and systems contractors: 13
5. Energy Saving Performance Contractors and Energy Auditors: 12

Total:73 participants from Canada, Denmark, Finland, Germany, Poland, Russia, South Korea and the USA,

Workshop Program

- Friday, February 4
  - Morning session: Scope and status of energy conservation programs conducted under DOD, DOE/FEMP, EPA, International Energy Agency, and several European national programs
  - Afternoon session: Energy conscious design and O&M guidelines, technologies screening tools

- Saturday, February 5
  - Morning session: Energy conservation technologies and measures for government building retrofits
  - Afternoon session: Brainstorming session in conjunction with the ASHRAE TC 7.6 Working Group "Energy Conservation in Federal Government Office Buildings and Industrial Facilities" and Energy saving technologies for industrial building retrofits

- Sunday, February 6
  - Planning meeting for the IEA ECBCS new Annex 46 "*Holistic Assessment Tool-kit on Energy Efficient Retrofit Measures for Government Buildings (**EnERGo**)*"